and the constitutional authority of the United States has declared that the income tax law is unconstitutional. This decision is not surprising if one considers the naked provision of the Constitution that direct taxes shall be apportioned according to population. But when the historical ambiguity of the term "direct tax" is considered and more important still the decisions of the Supreme Court in cases like Hylton *vs.* United States, the Pacific Insurance Case, and particularly Springer *vs.* United States, the layman cannot be blamed if he is somewhat puzzled. The decision of Springer *vs.* United States was given by a unanimous court. The recent decision in Pollock *vs.* Farmers' Loan and Trust Company was given by a court in which there were five concurring and four dissenting opinions. If the Springer Case was reversed it does not seem inconceivable that the recent decision may some day meet a like fate, especially if we recollect the history of the legal tender decisions. However unwise, inequitable and clumsy the recent law may have been and however content we may be to do without it, yet looking at the matter in the broadest light it seems unfortunate that the national government should be denied this important financial resource. Dr. Howe says, "The fiscal consequences of the decision may be quite as portentous as the legal and political ones. While the revenues are redundant and the customs and excise adequate to supply all possible current needs of the government the question is one of but little moment. In cases of emergency, however, the income tax is most essential to an adequate fiscal policy. . . . No tax is so fitted for emergency purposes as the income tax; for its yield is immediate, the receipts capable of expansion to meet unforeseen exigencies while its operations are in no sense obstructive to the freedom of industry and trade." Useful statistical appendices are provided and an analytical table of contents, but the book lacks a general index. It will undoubtedly be welcomed as a valuable account of this important subject.

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*Money and Its Relation to Prices.* Being an Inquiry into the Causes, Measurement and Effect of Changes in General Prices. By L. L. PRICE. Pp. 200. Price, $1.00. London: Swan Sonnenschein & Co. New York: Charles Scribner's Sons, 1896.

The sub-title of this book is misleading. It is an inquiry not into the causes of changes in prices, but rather into the effect which an increasing or diminishing supply of the precious metals has upon prices. The effect of credit upon prices, which could not be ignored

in a general discussion of the subject, the author does not attempt to consider thoroughly, although he endeavors to make proper allowance for it when looking for the effects of variations in the supplies of gold and silver. He acknowledges heavy indebtedness to Soetbeer and Jevons, and a student who is not familiar with the former's "*Materialen*" and the latter's "Investigations" will not read Mr. Price's book to the best advantage.

Mr. Price begins with an explanation of the various methods that have been used in the measurement of prices. He reviews the economic effects of such changes and then takes up as special subjects of study the rise of prices in the sixteenth century, the fall after 1810, the rise after 1850, and finally the fall of prices since 1873. In the first chapter he explains the "index number" and its value as a detector of changes in the purchasing power of money. He considers the claims of the arithmetic mean, of the geometric mean, of Professor Edgeworth's median, and of "weighted" averages, but is so brief and chary of illustration that most readers will have to consult his references before they understand him. As his subject is of the greatest popular interest at the present time, especially in the United States, it is to be regretted that he did not incorporate in his book the gist of some of the more important references. For all practical purposes Mr. Price concludes that the several methods for reaching the index number are equally good, for "errors tend to cancel one another," and the results got from the simple arithmetic mean "are generally similar to those obtained by the more elaborate processes."

The much-debated question of the effect of rising and falling prices upon economic prosperity Mr. Price handles in the second chapter intelligently and impartially. He reaches the general conclusion that "a period of rising prices seems to be more calculated than a period of falling prices to advance the general prosperity of the whole community." He has apparently not heard of the authoritative declaration made on this side of the water by over-zealous friends of the gold standard, that there is no such class as a "debtor" class in existence, for he falls in line with Jevons and considers the effects of changing price upon both creditor and debtor classes. Sudden alterations in the purchasing power of money are universally admitted to be injurious, but Mr. Price points out that alterations due to reduced or increased supplies of the precious metals are never immediate, nor even uniform and universal. As the average man seems incapable of recognizing a change in the value of money, his imagination during a period of rising or falling prices, due to changes in the supply of precious metals, has time to exaggerate both causes and effects, and he in consequence is correspondingly stimulated or depressed. "Nor is it

really opportune," as Mr. Price observes, "to suggest that if one party to a bargain gains another loses, or that the real wealth is not altered because of an increase in the number of the counters in which it finds its nominal expression." If the business community, employers and workmen understood the real cause of the change of prices, they might, as some writers claim they really do, discount the effect and so avoid mischievous miscalculations, but men do not understand the cause and lend a quick ear to the suggestions of an unreasoning imagination. This is certainly not strange when writers of standing like Horace White and H. D. Macleod, in the face of convincing evidence furnished by index numbers, deny that gold has increased in value during the last twenty-five years. Mr. Price thinks that credit furnishes wings to imagination, hastening and intensifying the effect upon prices of an increase or diminution in the supplies of precious metals. Thus, as predicted by Cairnes, an influx of the precious metals had a more immediate and greater effect in England, with its highly developed credit system, than in the eastern countries. The man most hurt by falling prices and most benefited by rising prices, according to Mr. Price, is the employer.

The wage-earner, while hurt for an interval by a rise of prices, since wages rise less rapidly than prices, is in the long run likely to get an equitable share of the new wealth, for production will be stimulated and the readjustment of relations between employer and wage-earner will be accomplished with less friction, not to mention the fact that recent economic tendencies are admitted to favor the workman rather than the employer. There is room for much debate here and Mr. Price is not at all dogmatic.

The chapter on "The Rise of Prices in the Sixteenth Century," contains an interesting analysis of the investigations and conclusions of Adam Smith, Soetbeer and Jacobs. With respect to the fall in the value of the precious metals after the discovery of America, because of the abundant output, he quotes with approval this sentence from Adam Smith: "It is accounted for accordingly in the same manner by everybody; and there never has been any dispute either about the fact or about the cause of it." Jacobs estimated the total production of the precious metals in the sixteenth century at £138,000,000, in the seventeenth century at £337,000,000, and in the eighteenth century at £880,000,000. Making allowance for consumption in the arts and loss by wear, Jacobs estimated that the coin of the world increased 300 per cent in the sixteenth century, 130 per cent in the seventeenth century, and 30 per cent in the eighteenth century. Soetbeer's estimates are considerably in excess of these figures, his totals being £380,000,000 for the sixteenth century, £498,000,000 for the

seventeenth century, and some £926,000,000 for the eighteenth century. Both these estimates, despite their wide divergence, support the inference that a large increase in the amount of coin must have taken place. Mr. Price considers reasonable Adam Smith's opinion that the increase in the sixteenth century caused a fall in the value of silver, and a corresponding rise of prices, of about 200 per cent. That the effect upon prices was not visible until 1570 Mr. Price thinks due to the great stimulus given to enterprise by the discovery of America, which must have greatly increased the commercial demand for money. Besides, the churches and the Orient absorbed a great deal of the first supplies of the new metal, and, furthermore, since credit operations were insignificant in that period, considerable time must have elapsed before the increase of coin had permeated all the channels of trade. In England paper money complications delayed the effect upon prices, and caused the advance to be precipitate, jerky and injurious when it came. Mr. Price admits that some suffering was caused among the laboring classes and in England among other classes, by the effect of the American supplies, but holds with Tooke and Newmarch that this was "compensated and repaid a hundredfold by the activity, the expansion and vigor which they impressed for more than one generation upon every enterprise, and every act which dignifies human life or increases human happiness."

From the discovery of America down to the beginning of the nineteenth century the world's stock of precious metals was augmented almost steadily at an increasing rate, and then came a sudden decline, continuing until 1850. According to Soetbeer the annual production of the precious metals in the first decade of this century was £10,400,000, in the second £6,400,000, in the third £6,000,000, in the fourth £8,100,000.

In the fifth decade, because of new supplies from California, it rose to £14,500,000, and in the sixth decade to £35,800,000. The diminution in the supplies of the precious metals between 1810 and 1850 Mr. Price estimates at some 40 per cent, while the index number of Jevons shows a fall of prices between 1809 and 1849 in the ratio of 100 to 41, and Sauerbeck's figures show a fall between 1818 and 1849 from 142 to 74, or about 47 per cent. Mr. Price does not take for granted that this fall is wholly due to the lessening supplies of precious metals. He admits the difficulty, or impossibility, of determining exactly to what degree the precious metals are responsible for the fall because of the great influence of other known causes, such as the expansion and contraction of credit operations and the increasing productivity of labor and machinery. The influence of credit he endeavors

to eliminate, as did Jevons, by a comparison of prices in the culminating years of the several periods of speculative activity, and finds a lower general level of prices before and after each crisis as the century progresses. As for the influence of increased production, he argues that this cause was in existence before 1810, the law of increasing returns applying then to manufactures as well as after 1810, yet prices rose. Hence a counteracting influence must have been present before 1810, and Mr. Price thinks it must have been the increasing supplies of gold and silver. The effect of the fall of prices in the first half of the century upon production and upon the condition of the wage-earner he thinks it impossible to determine, because of other potent influences, both political and economic, which were at work during the same period.

During the sixth decade of the century, when California and Australia added an enormous increase to the supply of gold, Mr. Price points out that economic conditions were vastly different from those of the sixteenth century. The modern industrial and financial system, with banking houses having credit connections in all parts of the world, was in existence by 1850, and *à priori* considerations alone would lead one to expect that a given cause would not act in 1850 as it had acted 300 years before. Over half a century elapsed before the new gold and silver affected prices in the sixteenth century, whereas the increase from California and Australia practically exhausted its effect upon prices within the ensuing decade. The increase in this century was larger and more rapid than that in the sixteenth century, but the permanent advance of prices after 1849, according to Jevons, was only 18 per cent, as against an advance of 200 per cent in the sixteenth century. Sauerbeck's tables show a rise of prices from 74 in 1849 to 105 in 1857, while Soetbeer's figures make the prices of 1857 30 per cent above the average for the years 1847-50. This advance is small in comparison with that of the sixteenth century, and the difference is explained in part by Mr. Price by the relative magnitude of existing stocks of precious metals, the stock at the beginning of the sixteenth century being estimated to amount to only £33,000,000. Mr. Price discusses with much acuteness the influence of credit in the absorption of the gold supplies of 1850–60, and makes a point for bimetallism by showing how the French mint had contributed a steadying influence to the value of gold by receiving that metal in exchange for silver, which was exported in large quantity to the East. The effect of the rise of prices Mr. Price holds to have been favorable, in some cases the wages of labor rising before the prices of food products.

The fall of prices during the last twenty years Mr. Price attributes to the increase in the demand for gold caused by the demonetization of silver, and to the fact that this increased demand has not been, except within the last few years, accompanied by an increased production of gold. Although he is here beating straw that has been vigorously threshed in recent years, his methods are original and rational, and he arrives at results which an advocate of monometallism, or of falling prices, should not assail with excessive confidence.

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*The Law of Corporate Finance.* By WILLIAM A. REID. Two vols. Pp. 1387. Price, $12. Albany, N. Y.: H. B. Parsons, 1896.

For some time past those interested in the financial systems of local governing bodies have been looking for a systematic treatise on the financial relations of these public corporations. Mr. Reid has given us a book in which these relations are fully considered. His work performs a twofold service: in giving us the more important case material on the subject, and thus paving the way for more general conclusions; and, secondly, in showing the relation between the legal rules governing private corporations and those relating to public corporations.

In his preface the author calls the work "a practical treatise on the law of corporate finance." This probably means to say that the practicing lawyer may here find ready reference to cases dealing with the fiscal operations of public and private corporate bodies. Judged from this standpoint, the work will be a most valuable aid to those who may wish to obtain a clear idea of the attitude of the courts to the important problems involved. In most cases the author assumes only the rôle of an expositor, maintaining a neutral position toward the reasoning of the courts. This method of treatment often leads to a confusion of ideas, from which it is difficult for the untrained reader to escape. The method of exposition is by general topics, public and private corporations being treated consecutively.

In view of the vast interests involved, the unsettled condition of many of the legal relations of public corporations is one fraught with much danger. New wants, new duties, new standards of public improvement, etc., have made increased demands, both as regards taxation and indebtedness upon these local divisions. The necessity of restraining the movement toward increased expenditures is shown in the recent constitutional amendments in many of the states, limiting both taxation and indebtedness, but especially the latter. The courts have not, in all cases, given full effect to the intentions of the